DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Department of Curriculum Management
Educational Assessment Unit

Core Curriculum Programme

Annual Examinations for Secondary Schools 2014

FORM 3 MATHEMATICS MARKING SCHEME

Notes for Marking of Scripts
Types of Marks

- **M**(ethod) marks are awarded for knowing a correct method of solution and attempting to apply it. Method marks cannot be lost for arithmetic mistakes. They can only be awarded if the method used would have led to the correct answer had not an arithmetic mistake been made. In general a correct method is implied by a correct answer and therefore **when a correct answer is given and no work is shown, no method marks are lost**.
- **A**(ccuracy) marks are given for correct answer only (c.a.o.) Incorrect answers, even though nearly correct, score no marks. Accuracy marks are also awarded for incorrect answers which are correctly followed through (f.t.) from an incorrect previous answer, **provided that f.t. is indicated in the marking scheme**. No method (M) or accuracy (A) marks are awarded when a wrong method leads to a correct answer.
- **B** marks are accuracy marks awarded for specific results or statements independent of the method used.

Misreading
M marks can still be earned (unless that part of the question is trivialized) but the final A marks are lost.

Crossed out working

An answer or working that is crossed out and not replaced is marked as if it was not crossed out. If the answer or working is replaced, then the crossed out answer or working is ignored and should not be considered for marking.

Units

In general, missing or inaccurate units are not penalised unless otherwise indicated in the marking scheme.

Other

- Incorrect working or statement following a correct answer is ignored.
- Marks are not sub-divisible; no half marks may be awarded.
- Other abbreviations used:
  - o.e. (or equivalent)
  - e.e.o.o. (each error or omission)
- Markers are advised to indicate the M, A or B marks awarded in the body of the script and then write their total in the margin. The total mark for each question should be written in the table included at the top of page 1 of the main paper. This measure facilitates the moderation of papers.

Non Calculator Paper (25 marks)

No.	Answers	Marks	Total
1.	a) 51 b) 14 c) 72 d) 9	B1 B1 B1 B1	4
2.	a) 10% × €250 = €25 b) ½ × 80 m = 40 m	M1 A1 M1 A1	4
3.	a) 4:00 pm or 16:00 b) 5:30 pm or 17:30	B1 B1	2
4.	a) 30c × 8 = €2.40 b) 40c × 7 = €2.80 c) Less	M1 A1 M1 A1 B1	5
5.	a) John b) Adding fractions 4/5	B1 M1 A1	3
6.	a) 40 + 20 + 40 + 20 = 120 m b) €1200	M1 A1 B1	3
7	a) (i) 12 (ii) 14 m b) i) Correct drawing ii) Correct answer	B1 B1 B1 B1	4

Main Paper (75 marks)

<table>
<tr><th>No.</th><th>Answers</th><th>Marks</th><th>Total</th></tr>
<tr><td>1.</td><td>Any correct combination</td><td>B4
(B2 if numbers are both even but totally incorrect)</td><td>4</td></tr>
<tr><td>2.</td><td>
<table>
<tr><td></td><td>odd</td><td>not odd</td></tr>
<tr><td>a 3-digit number</td><td>247</td><td>990</td></tr>
<tr><td>not a 3-digit number</td><td>25, 49</td><td>7002</td></tr>
</table>
</td><td>B5
(B1 for each correct entry)</td><td>5</td></tr>
<tr><td>3.</td><td>Correct numerator
Correct denominator
$\frac{6}{20}$ o.e.</td><td>B1

M1 A1</td><td>3</td></tr>
<tr><td>4.</td><td>a) 1000
b) 1
c) 100</td><td>B2
B2
B2</td><td>6</td></tr>
<tr><td>5.</td><td>36 hours, 25 days, 1 month, 8 weeks</td><td>B2 for identifying shortest
B2 for identifying longest
B2 for writing remaining times in order</td><td>6</td></tr>
<tr><td>6.</td><td>a)12
15
30

b) Correct reflection</td><td>B1
B1
M1 A1
B2 for 1st diagram
B4 for 2nd diagram</td><td>10</td></tr>
</table>

<table>
<tr><td>7.</td><td>a) (i) Attempt to divide by 2
€120
(ii) Attempt to add
€360
b) 3 × €2.50 = €7.50
6 × €1.00 = €6.00
Total = €13.50</td><td>M1
A1
M1
A1 f.t.
M1 A1
M1 A1
M1 A1</td><td>10</td></tr>
<tr><td>8.</td><td>a) 11, 14, 7, 3
b) 3 + 5 + 7 + 11 + 14 + 7 +3
= 50
c) No one (0)</td><td>B1 for every correct entry
M1 Attempt to add all entries
A1
B1</td><td>7</td></tr>
<tr><td>9.</td><td><table><tr><th>Shape</th><th>Number of faces</th><th>Number of edges</th><th>Number of vertices</th></tr><tr><td>Triangular Prism</td><td>5</td><td>9</td><td>6</td></tr><tr><td>Cylinder</td><td>3</td><td>2</td><td>0</td></tr><tr><td>Cube</td><td>6</td><td>12</td><td>8</td></tr></table></td><td>B9
(B1 for each correct entry)</td><td>9</td></tr>
<tr><td>10.</td><td>a) (2,3)
b) Correct plotting of points B and C
c) Joining points correctly
d) isosceles</td><td>B1 B1
B1 B1
B2
B2</td><td>8</td></tr>
</table>

11.	a) $\frac{40 \times 40}{100}$ = 16 b) (i) 15.2727… (ii) 15	B1 for each correct rounding M1 A1 B1 B1	7